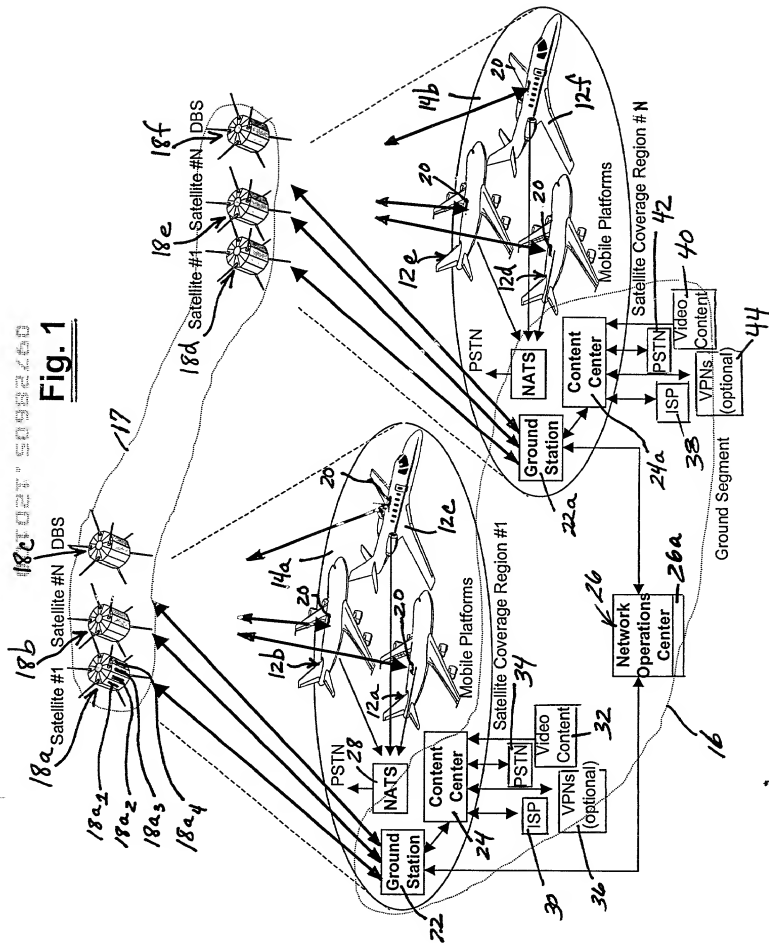
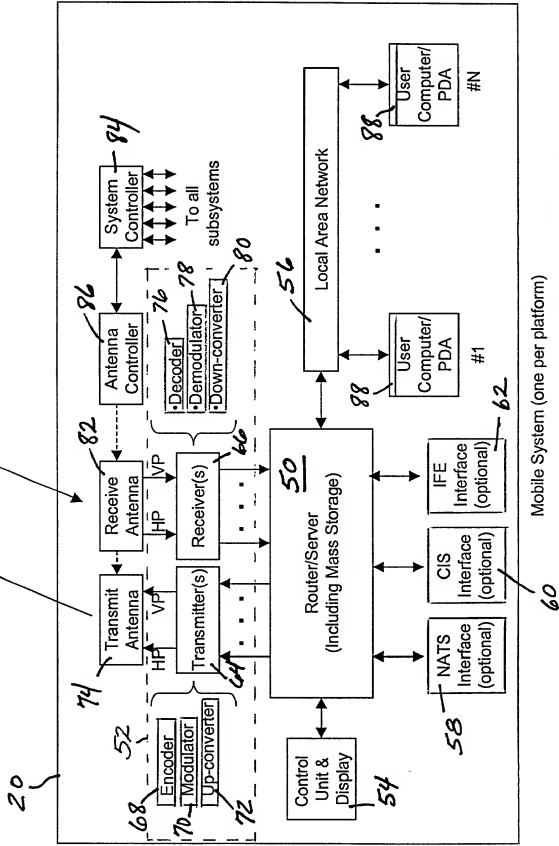


Fig. 1



To Satellites  
From Satellites



**Fig. 2 Mobile System**

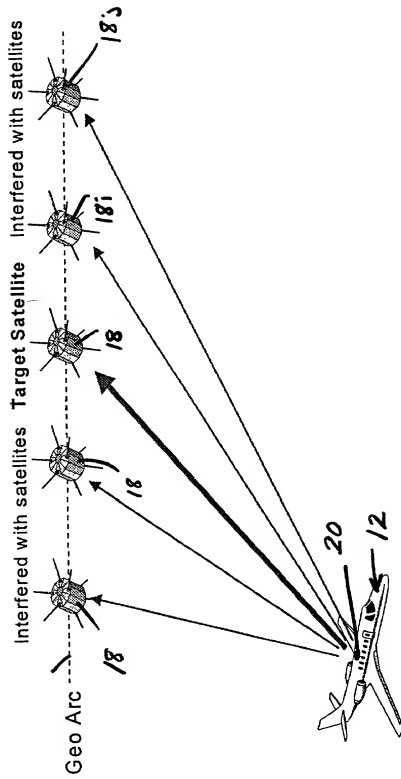


Figure 3

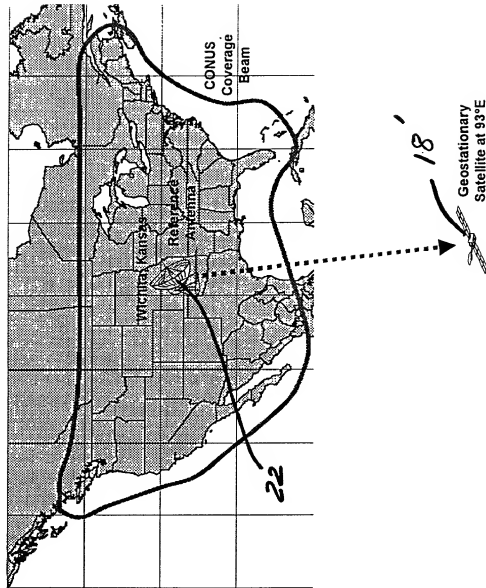
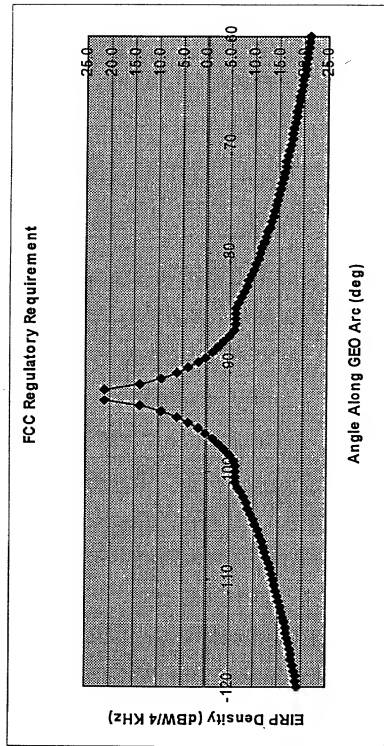


FIGURE 4



**Figure 5**

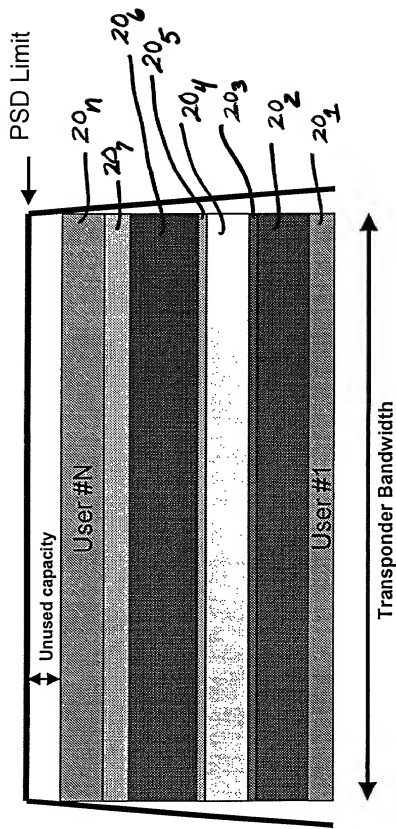


FIGURE 6

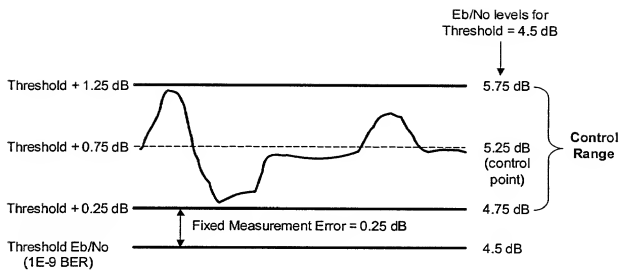
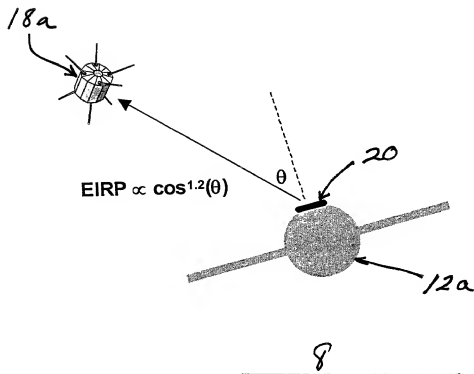


FIGURE 7



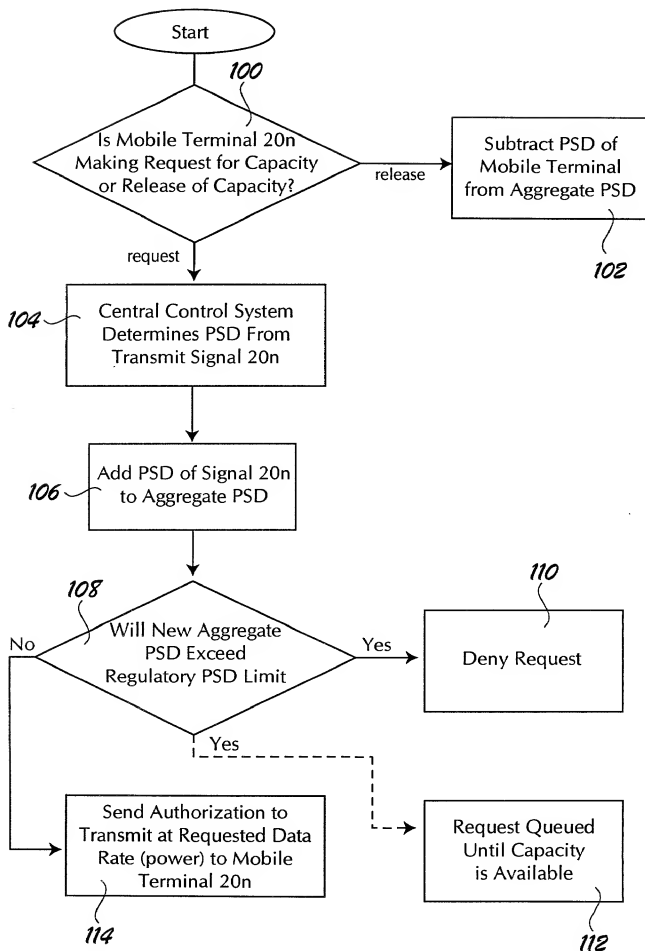


FIG. 9



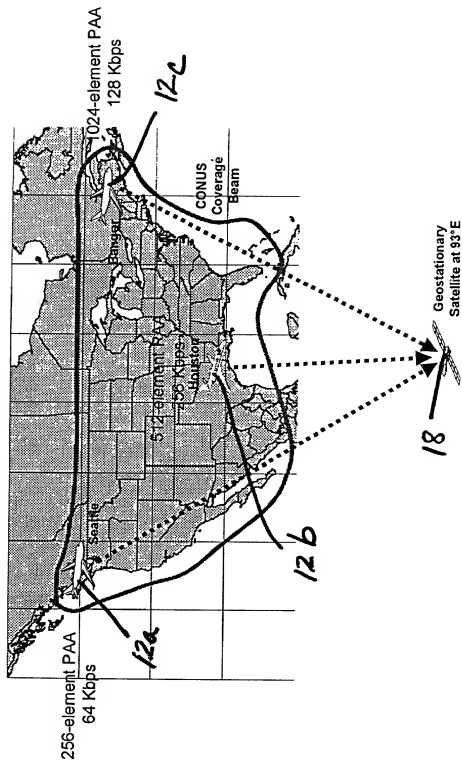


FIGURE 10

256 element  
Phased Array Antenna,  
34 dBW, 64 Kbps, Seattle

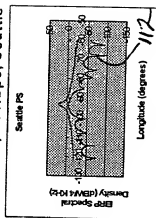
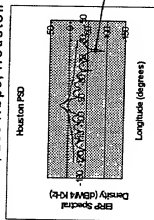


FIGURE 11

FIGURE 12

512 element  
Phased Array Antenna,  
39 dBW, 256 Kbps, Houston



1024 element  
Phased Array Antenna,  
37 dBW, 128 Kbps, Bangor

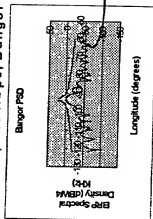


FIGURE 13

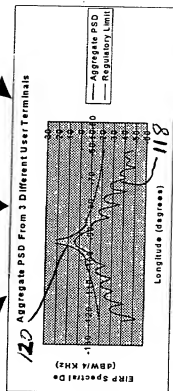


FIGURE 14